

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Anargyros Papageorgiou et al. Confirmation No.: 3844  
Application No.: 10/582,298 Art Unit: 2193  
Filed: September 18, 2007 Examiner: Kevin G. Hughes  
Title: FAST QUANTUM MECHANICAL INITIAL STATE  
APPROXIMATION

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**AMENDMENT IN RESPONSE TO NON-FINAL OFFICE ACTION**

Dear Sir:

In response to the non-final office action dated August 10, 2011, having a three-month shortened period of response set to expire on November 10, 2011, Applicants file this Amendment and a petition for two-month extension of time, thereby extending the deadline to January 10, 2012. Please amend the above-identified U.S. patent application as follows:

**Amendments to the Claims** are reflected in the listing of claims which begins on page 2 of this paper.

**Remarks/Arguments** begin on page 6 of this paper.

**Conclusion/Authorization** begin on page 11 of this paper.